BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	§	
	§	
Number Portability Query Services	§	CC Docket No. 98-14
	§	
	§	
Pacific Bell Tariff F.C.C. No. 128,	§	CCB/CPD 98-23
Transmittal No. 1927 and 1973	§	
	§	
Southwestern Bell Tariff F.C.C. No. 73,	§	CCB/CPD 98-17
Transmittal No. 2638 and 2694	§	
	§	
Ameritech Tariff F.C.C. No. 2	§	CCB/CPD 98-26
Transmittal Nos. 1123, 1130;	§	
	§	
Bell Atlantic Tariff F.C.C. No. 1,	§	CCB/CPD 98-25
Transmittal No. 1041	§	

CONSOLIDATED RESPONSE OF SOUTHWESTERN BELL TELEPHONE COMPANY AND PACIFIC BELL TO ORDER DESIGNATING ISSUES FOR INVESTIGATION

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July 1, 1998

SUMMARY*

The SBC LECs have demonstrated through their Query Tariff filings and their direct cases that their respective proposed rates are "just and reasonable." The following summarizes the SBC LECs' specific responses to questions posed in the Designation Order:

- The SBC LECs demonstrate that their direct costs and the application of overhead loading principles is within the bounds of FCC pronouncements. The SBC LECs' proposed rates are justified.

- However, the FCC's pronounced principles for the pricing of query services are not well matched with economic theory for the pricing of services, and particularly for competitive services.

- The SBC LECs' allocation of 15% of implementation costs to query services is reasonable in light of competitive neutrality principles and the existing record in CC Docket No. 95-116.

- The SBC LECs' non-recurring charges are cost based and adequately justified.

- The SBC LECs' "investments" in OSS and SS7 are clearly defined and adequately justified as resulting directly from the deployment of number portability.

- The SBC LECs' demand forecasts are justified in light of what is known about the need for the services and the availability of competitive substitutes.

- The SBC LECs' application of query charges for NXXs that have number portability available is consistent with the FCC's orders (e.g., the Third Report and Order), the technological needs of the network, and industry practices.

* Abbreviations used in this summary shall have the same meaning as the term in the text.

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I. INTRODUCTION

On March 4, 1998, Southwestern Bell Telephone Company ("SWBT") filed its number-portability-query-service-related revision to Tariff F.C.C. No. 73, under Transmittal No. 2694 (the "SWBT Query Tariff"). On March 13, 1998, Pacific Bell filed its number-portability-query-service-related revision to Tariff F.C.C. No. 128, under Transmittal No. 1973 (the "Pacific Bell Query Tariff").[1] SWBT's and Pacific Bell's filings each included a detailed Description and Justification and cost support. At the time their respective Query Tariffs were filed, the SBC LECs submitted the best available

[1] Where appropriate, SWBT and Pacific Bell will be collectively referenced as the "SBC LECs."

information on the costs underlying the services made the basis of the Query Tariffs and the best available estimates of demand for the long-term number portability services[2] encompassed by the Query Tariffs.

The precision of the SBC LECs' submissions, however, was limited somewhat because the FCC's then-issued orders did not clearly define the parameters of cost recovery or query services.[3] On May 12, 1998, the FCC released the Third Report and Order,[4] and on June 17, 1998, the Commission adopted and released its Order Designating Issues for Investigation (the "Designation Order").[5]

The Third Report and Order adopts for the first time a broad standard for the determination of what number portability costs are and are not recoverable through FCC-authorized end-user and query charges. Id. at ¶¶ 72-75, 47 C.F.R. § 52.33. The Commission, however, makes these standards subject in part to the notice and comment proceeding announced in the Third Report and Order for the specific determination of cost apportionment (the "Comment Request").[6] The FCC's standards for the preparation

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[2] Long-term number portability may be referenced herein as "number portability," "SPNP," or "LNP", depending upon the context.

[3] In the Matter of Telephone Number Portability, CC Docket No. 95-116, First Report and Order, FCC 96-286 (released July 2, 1996)("First Report and Order"); In the Matter of Telephone Number Portability, CC Docket No. 95-116, First Memorandum Opinion and Order on Reconsideration, FCC 97-74 (released March 11, 1997)("First Reconsideration Order"); In the Matter of Telephone Number Portability, CC Docket No. 95-116, Second Report and Order, FCC 97-289 (released August 18, 1997)("Second Report and Order").

[4] In re Telephone Number Portability CC Docket No. 95-116, Third Report and Order, FCC 98-82 (released May 12, 1998)("Third Report and Order").

[5] In the Matter of Number Portability Query Services, CC Docket No. 98-14, Order Designating Issues for Investigation, DA 98-1173 (released June 17, 1998) ("Designation Order").

[6] The Third Report and Order proposes that comments be generated and filed on August 3, 1998, with replies due September 15, 1998. See Third Report and Order at ¶ 75.

of the information provided in this response will, therefore, be developed in greater detail in the response to the inquiry launched pursuant to the Comment Request. As a consequence, the information set forth below in response to the Designation Order is prepared weeks or months before the responses to the Comment Request are due and without benefit of the FCC's standards that will result from its inquiry.

At the same time, the detail requested through the Designation Order is far greater than is required to determine whether the rates proposed by carriers for queries are "just and reasonable." This is particularly true because the query services are entirely optional on the part of customers who would purchase them. Carriers that would otherwise take services under the Query Tariffs can self-provide them or can purchase them from alternative commercial sources. If a query services provider's prices exceed the competitive market prices for these services, the carrier-consumers of query services will buy them from an alternative provider. The risk of over-pricing query services is entirely the providers'. An investigation of query costs beyond that which would be appropriate for any other new service offering by a common carrier is, therefore, inappropriate.

In this investigation, therefore, the Bureau must determine, based upon the evidence provided, whether the SBC LECs have met their burden of establishing that their rates are "just and reasonable." The Designation Order challenges aspects of the SBC LECs' costs, demand projections, and tariff application that gave rise to their respective rates. Under the assigned burden of proof, however, the Commission is bound by its obligation to perform reasoned decision making. SWBT and Pacific Bell urge the Commission to determine that the rates proposed are just and reasonable based upon the evidence presented and not upon the hyperbolic commentary of parties that will benefit

from any error the Bureau may propagate through improper analysis of costs or rate design.

II. SPECIFIC RESPONSES TO INVESTIGATION ORDER

The SBC LECs respond as follows to the Bureau's questions.

A. **Designation Order at ¶ 7.** *"[W]hether the carriers' proposed query service charges are based on costs directly related to providing number portability query services."*

1. Response to Designation Order.

The SBC LECs specifically identify the costs directly related to number portability query services in their respective tariff filings. In addition to the costs specified in the tariff filing, the claimed overhead costs are "directly related" as well.

Overhead costs are defined as those costs that are independent of the additions of units of service, such as number portability queries.[7] Overhead costs are necessary in order for a company to operate efficiently and survive and have been permitted in virtually every context. For instance, the FCC in its report and order in CC Docket No. 89-79 for Open Network Architecture required the use of an overhead loading factor.[8] Paragraph 44 of the ONA Order states, "Once the direct costs have been identified, LECs

[7] The FCC has stated that "[O]verhead costs include, for example, the costs associated with customer operations, marketing, corporate operations and land and buildings. These are costs common to a number of carrier services and generally are recovered through the rates for services. Ameritech, Bell Atlantic, Nevada Bell, NYNEX, Pacific, SNET and United are all price cap carriers that originally included overhead costs in their calculation of exogenous costs for data base 800 service." In the Matter of 800 Data Base Access Tariffs and the 800 Service Management System Tariff and Provision of 800 Services, CC Docket No. 93-129, Report and Order, CC Docket 86-10, 11 FCC Rcd 15227 at ¶ 49 n.94 (released October 28, 1996).

[8] In the Matter of Amendments of Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture, Policy and Rules Concerning Rates for Dominant Carriers, CC Docket Nos. 89-79, 87-313, Report

will add an appropriate level of overhead costs to derive the overall price of the new service." Id. In addition, the FCC stated in paragraph 682 of the First Report and Order in CC Docket No. 96-98,[9] "incumbent LEC's prices for interconnection and unbundled network elements shall recover the forward-looking costs directly attributable to the specified element, as well as a reasonable allocation of forward-looking common costs." Id.

The SBC LECs appropriately allocated a reasonable amount of shared and common costs to number portability service. All of the SBC LECs' services should recover a portion of these shared and common costs, because without incurring these costs, the enterprises could not offer the number portability services; they are, therefore, "directly related." Specific examples of applicable shared and common costs include billing systems, financial analysis, payroll, bill payment, processing, inventory and tracking. A reasonable amount of shared and common costs have been allocated to number portability based on a shared and common allocator comparable to the allocator described in the FCC's Local Competition Order, paragraph 696:

> We conclude that forward-looking common costs shall be allocated among elements and service in a reasonable manner, consistent with the pro-competitive goals of the 1996 Act. One reasonable allocation method would be to allocate common costs using a fixed allocator, such as a percentage markup over the directly attributable forward looking costs.

If a carrier's services in total do not recover all shared and common costs, then it cannot continue to be a viable enterprise. When certain services do not make a

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and Order & Order on Further Reconsideration & Supplemental Notice of Proposed Rulemaking, FCC 91-186 (released July 11, 1991) ("ONA Order").

[9] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, FCC 96-325 (released August 8, 1996) ("Local Competition Order").

contribution to shared and common costs, then the remaining services have a larger recovery burden. Within a company's portfolio, some services recover more than the reasonable amount of shared and common costs, and, therefore, have a higher margin, and some services recover less. In a competitive marketplace, such as telecommunications, competitors, on a going forward basis, will enter the markets that have the highest margin. The result of this competitive activity is that a carrier's revenue stream will be reduced either through market share loss or price reductions implemented to reduce market share loss within the pre-LNP portfolio of services. In this situation, a carrier runs the risk of not recovering all of its costs, which include the shared and common costs. The carrier's total company revenues would be insufficient to recover total company costs.

A failure to permit LNP query services to recover shared costs places a greater recovery burden on the remaining services. To the extent that LNP query services places pressure on carriers to maintain rates that are artificially high (so there is sufficient margin to continue to recover shared and common costs), those products become competitively vulnerable. A carrier's ability to introduce new services and have each service bear its load of shared and common costs is critical for it to fully recover its shared and common costs. Number portability is not an exception.

One of the advantages that a multi-product firm possesses is the realization of economies of scale. In practice, these economics translate to higher shared costs and lower product specific costs. If a firm with large economies of scale is not allowed to recover its shared costs, then competing firms will be able to advantage themselves competitively to the detriment of the incumbent. As an example, a carrier billing system

is considered a shared cost (it is more efficient to have a multi-product billing system than to have unique, product-specific systems). Except for the up-front modifications required for number portability, the billing costs are not included in the costs directly attributable to number portability. They are captured in the shared and common allocator. By not being able to recover a reasonable amount of shared and common costs through new services like number portability, continued recovery of billing costs will be at risk. This could force inefficient economic behavior such as implementation of unique billing systems.

The overhead loading factor SWBT used in its Query Tariffs was developed based on 1996 ARMIS data. Overhead loadings are prospective. To treat them otherwise would be to assume that the firm incurs no new overhead costs going forward—a ridiculous conclusion. Specifically, SWBT's methodology is outlined in SWBT's Description and Justification at ¶ 2.2.f in its tariff transmittal. As the FCC stated in CC Docket No. 92-91, "ARMIS data is a reasonable basis for alternative overhead calculations, and is the only verifiable method available."[10] ARMIS continues to be an accepted reporting method upon which the FCC depends for data.

In its development of the overhead loading factor, SWBT only included those expenses related to switching services, which in 1996 did not include number portability. Therefore, those switching services in existence at that time allowed for complete recovery of the joint and common costs. However, increasing competition in the marketplace has resulted in lower margins on existing services, reduced market share,

[10] In the Matter of Open Network Architecture Tariffs of Bell Operating Companies, CC Docket No. 92-91, Order, FCC 93-532 at ¶ 50 n.93 (released December 15, 1993).

and under recovery of joint and common costs. To achieve full recovery going forward, new services, such as number portability, must bear their burden of recovering overhead costs. Removal of the overhead loading factor from number portability queries would place an unfair competitive burden on all other services including services not regulated by the FCC, because number portability query services would not be contributing to their portion of the overhead expenses.

In accordance with the Local Competition Order, Pacific Bell identified forward-looking shared and common costs (as approved by the California Public Utilities Commission in D96-08-021) and identified a percentage markup over the directly attributable forward looking costs (Pacific Bell's TSLRICs).[11]

2. Economic Theory Does Not Support The FCC's Action.

Although the foregoing arguments take the SBC LECs' cost support and place it within the context of the FCC's order, an analysis within the FCC's framework is economically inappropriate. Indeed, the Commission's usage of terminology related to "overheads" makes responding to the Designation Order problematic, at best.

The use of general overhead loading factor applied to the incremental costs of number portability query service effectively creates a fully allocated cost study. The fully allocated cost represents the true costs to the firm in providing the service and absent market pricing capability represents a more appropriate price for the service as opposed to incremental costs. Incremental costs are appropriate for making market entry

[11] It should be noted that if the FCC now departs from the established practice of applying overhead loading factors, there is a major burden imposed upon the SBC LECs to attempt to retrospectively identify all costs among overhead categories as being incurred due only to LNP implementation. This burden results from the timing disparity

and exit decisions and to test for anticompetitive behavior. Incremental costs are not appropriate benchmarks for setting prices.

The general overhead loading factor developed in 1996 is intended to be a prospective factor that can accurately project new overheads incurred beyond 1996. It effectively eliminated the need to perform a fully allocated costs study on each and every new service. While developed utilizing a snapshot in time it cannot reasonably be concluded that the overhead loading factor developed in 1996 recovers all overhead costs incurred in 1998. To reach this conclusion, one would need to conclude that the SBC LECs have not incurred any new overhead costs since 1996. Clearly, the $1.2 Billion the SBC LECs will incur to deploy LNP has created new overheads.

B. **Designation Order at ¶ 8.** *"[W]hether the carriers' proposed allocations of total number portability costs to query services are reasonable."*

The rates for the SPNP Query Prearranged and SPNP Query Default and the SPNP Query Database Charges in this filing are computed using a methodology that includes a recovery of 15% of SWBT's and Pacific Bell's actual and projected costs. The rate structure the SBC LECs propose allocates the remaining 85% of the implementation costs to the Basic SPNP Service charge. See Third Report and Order at ¶¶ 135-49.

Importantly, N-1 carriers will have a choice in providers of LNP query services, such as those set forth in Query Tariffs. Competitive providers of query services may not be burdened the by the full telecommunications carrier costs of number portability implementation and will price their new query services just as they have any other service that they offer. The projected demand for SWBT's and Pacific Bell's query services,

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between the LNP deployment mandate with its causation of costs and the FCC's ongoing cost recovery preceding and precludes a "fair start."

therefore, is impacted negatively—that is, made lower—by the inclusion of cost recovery in what would otherwise be a rate calculated by normal service cost and pricing mechanisms.

N-1 carriers have, essentially, three ways to satisfy their obligations:

1. They can deploy their own network and database facilities (thereby incurring their own Type 2 costs) and subscribe to the NPAC;

2. They can purchase, either on a prearranged or default basis, the query services of either call-terminating LECs or independent providers of query services; or

3. They can deploy LNP functionality in their network and rely on another network's LNP database, e.g., purchase the SPNP Database Query Service.

Those telecommunications carriers that deploy their own N-1 capacities incur a corresponding start-up investment for required network facilities , such as the Local Service Management System ("LSMS"), ISCP or ISTP databases, augmentation of their SS7 networks and for their allocated portion of NPAC SMS costs, all of which are Type 2 costs. ¶ 137. In the absence of 15% of the SBC LECs' projected implementation costs being included in the rates for the query services that N-1 carriers purchase from them, those N-1 carriers that do not deploy their own N-1 capacities would be able to inappropriately avoid their share of number portability costs that have been expended, which would appear inconsistent with the Commission's goal of competitive neutrality. Section 251(e)(2) of the Act unambiguously requires that all telecommunications carriers contribute to number portability cost recovery on a competitively neutral basis. The methodology used by SWBT and Pacific Bell, including the 15% allocation of

implementation costs to the query services, advance the Act's and the FCC's obligation to achieve competitively neutral cost recovery.

As recognized by the Commission in its Third Report and Order, the ability to query a database to determine routing information for calls to NXXs where portability is available is an integral and fundamental part of long term number portability. Virtually all Type 2 expenditures are integral to the provisioning of the query functionality. As indicated earlier, SWBT's and Pacific Bell's tariffs for query services are offered in a competitive market place where returns are not guaranteed. SWBT and Pacific Bell have chosen to put at risk 15% of the actual and projected costs of implementing number portability.

The SBC LECs' allocation of 15% of their implementation costs to query services is easily justified. The SBC LECs' Description and Justifications, included in their tariff filings, reflect the following expected total query volumes:

Total	Internal/Resold
385,333,857,054	318,659,431,966

17.3% of queries, therefore, are expected from database, prearranged, and default services. This percentage closely approximates the 15% allocator of implementation costs chosen. In addition, AT&T has supported 15% of number portability costs allocation to interstate access charges to IXCs as a recovery mechanism. See Ex Parte Letter from Frank Simone to William F. Caton, Acting Secretary (September 25, 1997).

Finally, the original Ameritech query filing that the Commission approved contained the same 15% allocation.[12]

C. **Designation Order at ¶ 9.** *"[W]hether the carriers' methodologies and assumptions used to develop their proposed rates are reasonable. . . . Pacific Bell and Southwestern Bell have not explained why their 'non-recurring' billing charges need to be applied each month to default carriers, and have not adequately justified the level for this charge. Pacific also proposes substantial non-recurring charges for pre-arranged database services, but has not explained what costs are incurred nor adequately justified these rate levels."*

The very nature of default queries dictates that LECs performing such queries have no idea of where or when the next query will occur. A N-1 carrier is not obligated under the FCC's rules to inform the terminating LEC of its intention to make default queries has no obligation to continue to use the default query services once it has used them the first time. As a result, the fact that a particular carrier sent default traffic one month says nothing about what might occur the following month. Therefore, the SBC LECs' respective billing charges assume each occurrence to be a unique event. Carriers that "expect" to forward unqueried traffic on a recurring basis can avoid the proposed SBC LEC billing charge by prearranging to have LNP queries performed for them.

1. SWBT and Pacific Bell.

This section applies to both SWBT's tariff references and Pacific's unique nonrecurring charges.

Specifically, the default billing charges recover the costs of service center personnel to (a) investigate default query usage in a given billing period, (b) contact the

[12] To the extent that the Commission ultimately determines that any part of these costs are not recoverable through query services, SWBT and Pacific Bell reserve the right to recover them through the Commission's end-user charge mechanism.

carrier if necessary, and (c) process the order to set up the default query billing account. The average work times required to perform these activities were obtained from experienced subject matter experts. These work times were then multiplied by the applicable labor rate to calculate the cost per bill.[13]

2. Pacific Bell.

Pacific Bell's SPNP Service Tariff filing offers to those carriers choosing not to provide their own LNP databases, access to the Pacific Bell LNP data base. This service, referred to as SPNP Data Base Query Service, utilizes CCS/SS7 data paths to provide connectivity between the carrier and Pacific's data base. These data paths must be installed and screening tables must be translated for point codes by Pacific's personnel at the STP. These activities, along with the ordering process, cause nonrecurring costs. Pacific Bell has chosen to recover these costs via nonrecurring charges that vary based upon the extent to which the carrier wishes to have connectivity, that is, either LATA-wide or statewide using multiple STPs.

Pacific Bell's costs of queries include the cost of a service representative to work with the carrier and process the provisioning order and the cost of communications technicians to build and verify the translations and routing information. The costs were obtained by identifying the involved work groups, the specific tasks, and the average time to accomplish each task. Task occurrence factors (how frequently a task is performed for an average service order) and work group occurrence factors (how frequently a work group is involved in an average service order) were developed. The cost for each work

[13] Labor rates are developed from payroll records, which are used to derive labor costs for specific job titles, including base pay with loadings for benefits, Social Security costs, and the like.

group was based on the task times, multiplied by occurrence factors, and the appropriate labor rates based on job classifications. Work group totals were summed to derive total costs for service connection.

Although Pacific Bell cannot speculate on why other LECs offering similar data base access would not have similar rate elements, they certainly perform similar functions and have similar expenses for the ordering, installation, and translation functions. However, one explanation may be the fact that Pacific Bell chooses to associate its cost recovery with the service being offered through tariffed rate elements. Other carriers may opt to cross reference between tariffs using existing nonrecurring rate elements for recovery (see, e.g., with SWBT's Data Base Query Service). Pacific does not have an existing rate element that it can reference.

D. **Designation Order at ¶ 9.** *"[A]dequately identif[y] and explain[] listed 'investments'."*

The SBC LECs' proposed LNP query charges are based upon a forecasted query load on SS7 and switched network facilities directly related to supporting number portability queries. Additional load caused by LNP queries drives the additional SS7 facilities and integrated STP data base capacity sizing. SWBT and Pacific Bell modeled their SS7 networks to determine the incremental increase in LNP query load and used vendor guidelines and internal capacity guidelines to determine sizing of SS7 links, STPs, and LNP data bases. Engineering of the SS7 network and LNP databases takes into consideration busy-hour-link-set traffic, traffic distribution bias over links caused by Signaling Link Selection codes, likelihood of link failure, and diversity requirements in order to maintain network reliability.

The SBC LECs' existing networks, prior to LNP, were equipped to provide a wide range of services using the SS7 network, including CLASS, IN services such as 800 database service, and AIN. The costs of upgrades to switch software and hardware, SS7 signaling network, OSS and billing systems included in the filing are directly attributable to providing number portability and are not intended or required to enhance the network to support other services. These costs are supported by various studies conducted by switch vendors and internal sizing/capacity analysis to identify incremental impacts to switch hardware, memory, and processor resources to provision LNP triggers and local routing number ("LRN") technology and to route and bill LNP calls. SS7 signaling links were also engineered to handle the added load of queries and response signaling messages and the incremental SS7 links needed to route ported customers to their new provider.

The vendor hardware and software selected for deployment within the SBC LECs to support LNP database functionality, specifically LRN and Message Relay Service ("MRS") functionality, is a DSC Communication ("DSC") solution. The DSC LNP Integrated Signal Transfer Point ("ISTP") solution implemented the LRN and MRS functionality. DSC has stated in writing that this integrated LNP architectural solution was only developed to meet their customer's needs relative to compliance with the Telecommunications Act of 1996 and the FCC's First Report and Order.

1. SS7 Investment.

The SS7 query investments used in SWBT's tariff filing were developed using long-run incremental unit cost methodology based on capacity costing economic theory. Pacific Bell used Total Service Long-Run Incremental Cost ("TSLRIC") methodology to

develop the query service charge. This means that only the direct incremental unit investments for number portability queries were identified, and there was no allocation of SS7 query investments between number portability and other services.

The SS7 investments included in the Prearranged, Default, and Data Base Query costs follow. Only those investments that were directly related to or dedicated to launching and completing a number portability query were included for recovery through the SPNP query service tariffs.

- STP Link Termination – This investment reflects the processing done at the STP to terminate a number portability query. The investment was identified on a per query basis assuming the STP was operating at capacity. Therefore, no "waiting to serve" investment was included since it is shared by all services that use the SS7 network.

- Link Transport Facilities and Terminations – This item reflects the investment required to transport a number portability query from the end office to the STP and between STP's for processing. The investment was identified on a per query basis assuming the links were at capacity; therefore, no "waiting to serve" investment was included.

- End Office Query Launch – This item reflects the end office switch processor and SS7 link investment used to launch a number portability query over the SS7 network. The investment was identified on a per query basis assuming the switch is operating at capacity; therefore, no "waiting to serve" investment was included.

- ISTP Database – This item reflects the investment for the dedicated number portability database, which resides in the STP. Because this investment is dedicated to number portability, the investment per query was identified by dividing the total investment by the total forecast query demand, thereby identifying the "at capacity" incremental investment as well as the "waiting to serve" investment per query. This methodology was used because the entire database investment was caused by, and should be recovered from, number portability service.

2. OSS Investment.

SPNP OSS investments can be broken down into three categories:

- New systems that were developed specifically for SPNP. These investments include the LSMS, SOA and charges to SWBT or Pacific Bell from the NPAC for access to RSMS. All costs associated with the development and deployment of these systems were considered as Type 2 and cost recoverable in deriving query rates.

- Existing service provisioning systems where vendor modifications or enhancements were required to support SPNP services. These investments include systems which support the porting out of telephone numbers to a CLEC and the porting of CLEC telephone numbers to SBC LEC retail or SBC LEC wholesale or resale customers. Multiple systems were impacted in order to support POTS, special design, and ISDN services. These systems support the tracking, modifications, testing, and completion of service orders. Because SPNP service orders involve the change of service providers on existing services, coordination and testing are critical to the exchange. Without these enhancements, the provisioning of SPNP services would not be handled in the same capacity and thoroughness as non-SPNP service orders. Service orders would fall out of the normal process flows and have to be handled on a manual basis increasing the probability of errors and customer service outages. Only the costs of system modifications that are solely and directly related to SPNP were included as Type 2 and cost recoverable in deriving query rates. The SPNP costs that were included were for enhancements to support SPNP and generally include supplier system modifications to support the FIDS and USOCs for SPNP and the ability to identify when a telephone number was ported out to a CLEC or ported in from a CLEC.

- Network systems enhanced for SPNP. Network systems such as NetPilot and MARCH were enhanced to support or update network elements (e.g., STPs and switches) to ensure the proper call routing of SPNP services in the network. Only those cost directly related to supporting SPNP data were included as Type 2 and cost recoverable in deriving query rates.

Appendix A, attached hereto, summarizes system modifications and their impact on SPNP.

E. **Designation Order at ¶ 10.** *"Carriers in their direct case must identify each cost proposed to be recovered, explain why it is a direct cost of providing number portability query service, and explain the methodology by which any portion of a joint or common cost is allocated to query service charges."*

The SBC LECs' filings explain the direct costs sought to be recovered; we now provide the following additional details.

1. Overhead Loadings.

The overhead loading factor development and application is set forth in the response to Paragraph 7, supra.

2. SS7 And OSS Investments Included As Direct Costs.

The SS7 and OSS investments included in the Prearranged, Default, and Data Base queries are described in the response to Designation Order at ¶ 9, supra.

3. Assumptions Regarding Any Portion Of The Query Cost Calculation Including, But Not Limited To, Assumptions About Depreciation, Cost Of Capital, And Taxes.

The query charges recover the costs of depreciation, cost of money, income taxes, and operating expenses incurred as a result of the provisioning of number portability query service. For SWBT, because the cost factors reflect the relationship of expenses to one dollar of investment and are applied to the directly related query investment, only those expenses directly related to number portability query service are recovered. For Pacific Bell, the query costs recover the costs of depreciation (using the FCC-prescribed lives), cost of money (based on the FCC authorized rate of return of 11.25%), and standard tax rates incurred as a result of the deployment of number portability query service.

F. **Designation Order at ¶ 11.** *"[W]hether the carriers' demand forecasts are reasonable."*

Attached as Appendix B is a complete list of the assumptions used in forecasting query demand and their basis. Each of these assumptions is demonstrated to be reasonable.

G. **Designation Order at ¶ 14.** *"[W]hether imposing query charges on calls to number portable NXXs is reasonable given the absence of a need to query if no number has ported from an NXX."*

1. Applicable FCC Statements/Rulings Make This Inquiry Superfluous.

The Third Report and Order states, "Once number portability is available for an NXX, carriers must 'query' all interswitch calls to that NXX to determine whether the terminating customer has ported the telephone number." Id. at ¶ 15 (emphasis added). CLECs have required that ILECs, including SWBT, make portability available for all NXXs in selected switches. That means that they will have the ability to port the first number in that NXX within a maximum of five days and all subsequent numbers within a maximum of three days.[14]

The FCC further states in the Third Report and Order, "In addition, long-term number portability requires N-1 carriers to incur query costs for all interswitch calls to an NXX once number portability is available for that NXX, whether or not the terminating customer has ported a number." Id. at ¶ 46 (emphasis added). Finally, in the Second Report and Order the FCC notes that "if the N-1 carrier does not perform the query, but rather relies on some other entity to perform the query, that other entity may charge the N-1 carrier, in accordance with guidelines the Commission will establish to govern long-

[14] Moreover, there is activity underway in the NANC at this time to analyze and shorten these porting intervals.

term number portability cost allocation and recovery"[15] and that "if a LEC performs database queries on default routed calls, the LEC may charge the N-1 carrier, pursuant to guidelines the Commission will establish regarding long-term number portability cost allocation and recovery."[16] This decision was reaffirmed in the Third Report and Order.[17]

2. Charging For Queries When LNP Is Available In An NXX Is Appropriate.

It is true that calls to NXXs without a ported number will not always require a query in order to route correctly. However, the entire industry recognizes that routing translations cannot be performed instantaneously, and therefore must be performed sufficiently in advance of an actual service request to facilitate meeting the strict interval guidelines of the ordering process. The debate really centers on two issues: (a) the interval required for routing translations and testing, and (b) the billing to recover the cost for queries performed before the first number is ported in an NXX.

a. The Routing Translation Interval Requires The Use Of The SWBT/Pacific Bell Solution.

The SBC LECs' process is consistent with the industry-developed and industry-standard LERG NXX Code Opening Process. See SWBT and Pacific Bell Rebuttal, CC Docket No. 98-14 at 3-17 (filed February 27, 1998) ("SBC LECs Rebuttal"). This process was created by the industry to provide an orderly and efficient national method for activating NXX codes. It was specifically designed by the industry to allow

[15] Second Report and Order at ¶ 75.

[16] Id. at ¶ 78. Footnote 206 of the Second Report and Order provides the following definition: "A default routed call is a call that is transported to the customer's original local exchange carrier without having been queried to determine whether the customer has ported the number to another local exchange carrier."

[17] Third Report and Order at ¶ 142.

telecommunications carriers adequate time to perform and test routing translations so as to avoid routing problems.

The LERG process was adapted for LNP and adopted by the industry in the Southwest Region Network Operations Team and is also in use in the West Region. SWBT and Pacific Bell have designed their implementation processes accordingly.

Translations have already been input as part of the testing and deployment process for virtually all of the Phase I - Phase III MSA switches. A change at this point would require removal of routing translations for thousands of NXXs in hundreds of switches, only to have to input and test them again when the first number ports.

Moreover, the proposal to not query until the first number ports doubles the translation and testing work, costs and chance for errors associated with NXX code opening. Each new NXX code would require initial routing translations to be built, activated and tested in each switch when it is first opened in the LERG, and then it would require additional routing translations to activate querying to be built, activated, and tested when the first number ported in the NXX.

The LERG is the single national database that defines routing treatment for every NPA-NXX in the North American Numbering Plan. The industry has agreed that the LERG will be used to designate NPA-NXXs as available for portability or non-portable. If the LERG is not used as the trigger for routing translations to activate queries, its utility as a single source of routing information will be severely compromised. The absence of a system document that identifies which NPA-NXXs require queries or a comprehensive source of routing information for NPA-NXXs will significantly hinder routing trouble analysis and prevention.